

IV. REMARKS

Claims 1, 2, 4-6, 8, 9 and 11 are pending in this application. By this amendment, claims 1, 6, 8 and 9 have been amended, and claims 3, 7 and 10 have been cancelled. Applicants do not acquiesce in the correctness of the objections and rejections and reserve the right to present specific arguments regarding any rejected claims not specifically addressed. Further, Applicants reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claims priority to the instant application. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Applicants note that the pending claims are still incorrectly cited on the Office Action summary because it omits claim 11. Correction is requested.

With regard to the Office's re-statement regarding the improper listing of references, Applicants cannot decipher what the Office is requesting. Again, Applicants submitted an Information Disclosure Statement (IDS) (PTO-1449) for all references listed in the specification on 12/16/02. The Office initialed that IDS on 9/17/03 and returned it with the 10/6/03 Office Action. In addition, an electronic IDS for US patents was submitted with the application. The Office's statement that "unless the references have been cited by the examiner on form PTO-892, they have not been considered..." seems to disregard Applicant's PTO-1449 citations. Applicants request clarification as to which references on page 4, para. 4 have not been properly cited, or some other specific instruction as to what action the Applicant should take further to ensure proper consideration of the references. If the Office is attempting to state that Applicants have improperly listed prior art in the specification rather than simply listing it in an IDS, Applicants submit that there is no prohibition in the MPEP 609 III, 1A(1), or elsewhere, against

specifically discussing some of the references cited in an IDS. The above-cited MPEP section is meant to prevent listing of all references in the specification rather than on a separate sheet.

In the Office Action, claim 6 was rejected under 35 U.S.C. §102(b) as being anticipated by Yamaguchi *et al.*, *Process and Device Optimization of an Analog Complementary Bipolar IC Technology With 5.5-GHz fT PNP Transistors*, hereinafter "Yamaguchi"; claims 1-3, 5, 7 and 9 were rejected under 35 U. S. C. 103(a) over Yamaguchi and Babcock *et al.* (U.S. Publication No. 2003/0080394), hereinafter "Babcock"; claim 4 was rejected under 35 U. S. C. 103(a) over Yamaguchi in view of Babcock and Goth (U.S. Patent No. 4,719,185), hereinafter "Goth"; claim 8 was rejected under 35 U. S. C. 103(a) over Yamaguchi; claim 10 was rejected under 35 U.S.C. 103(a) over Yamaguchi in view of Babcock and Hame *et al.* (U.S. Patent No. 4,997,776), hereinafter "Hame"; and claim 11 was rejected under 35 U.S.C. 103(a) over Yamaguchi in view of Goth. Applicants submit that the pending claims are allowable and thus respectfully request withdrawal of the rejections.

With respect to independent claims 1 and 6, Applicants submit that Yamaguchi fails to disclose the claimed invention "wherein the single layer is polysilicon and includes germanium in the emitter region of the PNP transistor, and mono-crystal silicon in a portion of the extrinsic base region and mono-crystal silicon in the intrinsic base region of the NPN transistor." Claim 6, and similarly recited in claim 1. The Office admits this in the Office Action, and relies on Babcock and Hame to reject the above-stated recitation, as previously recited in claim 10. Applicants submit that the rejections should be withdrawn for the following reasons.

First, Applicants submit that the Office has misinterpreted Hame. In particular, Hame provides a polysilicon emitter 72 (FIG. 7) for the NPN and a monocrystalline emitter 96 for the

PNP. See col. 6, lines 21-28 and lines 57-66. In contrast, the claimed invention includes, *inter alia*, a polysilicon emitter region for the PNP transistor. Claims 1 and 6. Accordingly, Applicants submit that the combination fails to disclose or suggest each and every feature of the claimed invention.

Second, Applicants submit that one with ordinary skill in the art would recognize that the references are un-combinable for process and structural reasons. In terms of structure, Yamaguchi focuses exclusively on implanted silicon and metal to generate the transistor, i.e., there is no polysilicon in Yamaguchi. In contrast, Babcock and Harame use polysilicon. Further, Yamaguchi uses a single layer of silicon, while Babcock and Harame disclose use of multiple layers. Therefore, Yamaguchi and Babcock/Harame are significantly structurally different. Applicants submit therefore one with ordinary skill in the art is unlikely to combine these references.

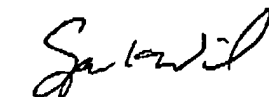
In terms of processing, in Babcock, carbon or other carbon-bearing species such as SiGeC are used to retard the diffusion of the common P-type dopant, e.g., boron, and common n-type dopant. Note Page 3, Paragraph 0034. Applicants submit that use of a SiGeC diffusion retardant to form a germanium containing emitter would destroy the teachings of Yamaguchi. For example, one with ordinary skill in the art would recognize that use of the diffusion barrier of SiGeC would interfere with the arsenic (As) implanting used in Yamaguchi. In particular, the SiGeC would cause loss of control of the arsenic diffusion. In addition, if germanium were included in the emitters of Yamaguchi, it would create leakage centers in the silicon at the p-n junctions, such as the base-emitter junction. The DC characteristics would be leaky and unusable. Applicants submit that Yamaguchi was probably aware of this situation because

germanium is only included in the P+ buried layer (last paragraph pg. 1020), far from the emitter. In view of the foregoing, it is incomprehensible why a person having ordinary skill in the art would modify Yamaguchi to incorporate Babcock. The Office's asserted motivation that "balance" would be facilitated does not make sense when the subject matter is reviewed as a whole, and in context. Applicants submit there is simply no motivation to combine Yamaguchi and Babcock as the Office asserts. Accordingly, Applicants request withdrawal of the rejections.

Claims 2 and 5 are dependent upon claim 1 and claims 8, 9 and 11 are dependent upon claim 6. Applicants submit that those dependent claims are allowable for the same reasons stated above, as well as for their own additional features.

Applicants respectfully submit that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, he is requested to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,



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